

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Griffin Wheel Company
Facility Location: 416 Carbide Lane
Keokuk, IA 52632

Air Quality Operating Permit Number: 02-TV-014R1

Expiration Date: 5/18/2013

Permit Renewal Application Deadline: 11/18/2012

EIQ Number: 92-2304

Facility File Number: 56-01-023

Responsible Official

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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V. **Appendix A: 40 CFR 63, Subpart ZZZZZ:** National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources.....**82**

Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS	new source performance standard
ppmv	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC	Standard Industrial Classification
TPY	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compound
CO	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Griffin Wheel Company

Permit Number: 02-TV-014R1

Facility Description: A steel foundry that forms rail car wheels from steel scrap. (SIC 3325)

Equipment List

Emission Point Number	Emission Unit Number(s)	Emission Unit Description	IDNR Construction Permit Number
EP-1	EU-1 EU-3B EU-4	Scrap Handling Arc Furnaces (3) with Co-Jet Technology Ladle Preheat	05-A-218
EP-2	EU-2	Lime Storage Silo	03-A-962
EP-3	EU-3A	Arc Furnaces (3) with Co-Jet Technology	76-A-107-S2
EP-4	EU-6A	Enclosed Pressure Pouring/Casting Station	03-A-996
EP-5	EU-5 EU-6B EU-9 EU-10 EU-17A EU-17B EU-18 EU-21 EU-34 EU-37	Tube Preheat Pressure Casting Normalizing Furnace Tempering Furnace Riser Knockout Riser Knockout Core Baking Mold Holding Oven Mold Preheat Oven (3) Tube Curing	03-A-963-S1
EP-6	EU-8A EU-8B	Hubcutter (3) Hubcutter (3)	76-A-116-S3
EP-7	EU-13	Apex Grinder, Wheel Grinder, Final Grinding, Chamfer Grinder	88-A-160
EP-8	EU-12 EU-15	Shot Blast Wheel Cleaner (EU-12) & Wheel Peener (EU 15)	76-A-117-S1
EP-9	EU-19	Cope Cleaning	76-A-109
EP-10	EU-20A EU-20B EU-23A EU-23B	Cope Coating Baghouse Preheater Drag Spray Coating Baghouse Preheater	76-A-111-S1
EP-11	EU-22	Drag Cleaning	76-A-108
EP-13	EU-24	Sand Silo	03-A-964
EP-14	EU-25	Sand Transfer	03-A-965
EP-15	EU-26A EU-26B EU-28	Sand Heater Sand Heater Distribution Cyclone	76-A-110

Equipment List (continued)

Emission Point Number	Emission Unit Number(s)	Emission Unit Description	IDNR Construction Permit Number
EP-16	EU-27	Sand Mixer	05-A-217
EP-17	EU-29 EU-30 EU-31	Bucket Elevator 1 Bucket Elevator 2 Core Baker Bins (4)	87-A-141
EP-18	EU-32	Graphite Mold Machining	76-A-113-S1
EP-19	EU-33	Ingate Lathe Machining	06-A-454
EP-20	EU-7	Grinding	97-A-537
EP-21	EU-35	Road & Landfill	

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
36	58 Natural Gas Heaters < 10 MMBtu/hr
N/A	Natural Gas Fired Emergency Generator—35 kW
N/A	Cooling Towers

II. Plant-Wide Conditions

Facility Name: Griffin Wheel Company
Permit Number: 02-TV-014R1

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years
Commencing on: 5/16/2008
Ending on: 5/15/2013

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Emission Point-Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming

operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Griffin Wheel is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Griffin Wheel shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

NSPS Applicability

The emissions units of Griffin Wheel Company are not subject to a NSPS subpart at this time.

NESHAP Applicability

The operations at this facility are subject to the requirements of 40 CFR 63 of Subpart ZZZZZ, "National Emission Standards for Iron and Steel Foundries Area Sources".

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZZ

The operations at this facility are not subject to the requirements of 40 CFR, Part 63, Subpart EEEEE, "National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries". The facility has construction permits that limit the potential to emit of a single hazardous air pollutant from the facility to 9.4 tons per year and that limit the potential to emit of total hazardous air pollutants from the facility to 24.4 tons per year.

Therefore, in accordance with section 63.7681, the facility is not a major source of HAP emissions, and the requirements of Subpart EEEEE do not apply.

III. Emission Point-Specific Conditions

Facility Name: Griffin Wheel Company
Permit Number: 02-TV-014R1

Emission Point ID Number: EP-1

Associated Equipment

Associated Emission Unit ID Numbers: EU-1, EU-3B, EU-4

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
EP-1	EU-1	Scrap Handling	Steel Scrap	42.4 ton/hr
	EU-3B	Electric Arc Furnaces (3) with Co-Jet Technology	Steel Scrap, Additives	38.3 ton/hr
	EU-4	Ladle Preheat	Natural Gas	0.009 mmcf/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 05-A-218

⁽¹⁾ An exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf, 24.9 lb/hr.

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 05-A-218

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Iowa DNR Construction Permit 05-A-218

Pollutant: Single Hazardous Air Pollutants (Single HAP)

Emission Limit(s): 9.4 TPY

Authority for Requirement: Iowa DNR Construction Permit 05-A-218

Pollutant: Total Hazardous Air Pollutants (Total HAP)

Emission Limit(s): 24.4 TPY

Authority for Requirement: Iowa DNR Construction Permit 05-A-218

Pollutant: Total Hazardous Air Pollutants Metals (Total HAP Metals)

Emission Limit(s): 6.21 TPY

Authority for Requirement: Iowa DNR Construction Permit 05-A-218

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

- A. The permittee shall operate the EAF baghouse whenever an electric arc furnace is in operation. The average capture efficiency during charging, melting, refining, and tapping operations shall be 95%. This is based on information provided by the permittee on the capture efficiency of the side draft hoods and the slag door hoods on the furnaces. It is also based on the US EPA documents, Summary of Factors Affecting Compliance by Ferrous Foundries, Volume I, January, 1981 and Electric Arc Furnaces in Ferrous Foundries – Background Information for Proposed Standards, May, 1980.
- B. The permittee shall minimize the charging of scrap that contains oil, grease or organic impurities.
- C. The furnaces shall be used to produce carbon steel. Prior to operating the furnaces to produced alloyed steel, the permittee shall notify the Iowa DNR, Air Quality Bureau.
- D. The ladle preheater shall use natural gas or propane. The maximum heat input is 0.009 mmcf/hr.
- E. The permittee shall maintain and operate the capture hoods and the capture system on the electric arc furnaces in accordance with the manufacturer's recommendations.

Authority for Requirement: Iowa DNR Construction Permit 05-A-218

Operating Condition Monitoring

- A. In every two week calendar period, the permittee shall perform at least one opacity check, when the electric arc furnaces are in operation and when the weather conditions allow, for visible particulate matter emissions from the melt shop roof exhausts. The purpose of this check is to confirm that the capture hoods and capture system on the electric arc furnaces are operating properly. The visible emission checks shall be performed during periods when visible particulate matter emissions are expected to occur (e.g. during

melting and oxygen lancing). The opacity of the roof exhaust shall be recorded for at least 24 minutes in accordance with US EPA Method 9. The permittee shall record the following information for each opacity check:

- i. the average opacity;
 - ii. the operation occurring during the visible emission observation;
 - iii. whether the visible emissions are representative of normal operations;
 - iv. if the emissions are not representative of normal operation, the cause of the abnormal emissions; and
 - v. any corrective action taken to minimize the visible emissions.
- B. The permittee shall record the monthly emissions of single HAP metals and total HAP metals that are not captured by the EAF baghouse. The basis of the record shall be the most recent testing done for HAP metals under section 12 of Iowa DNR Construction Permit 05-A-218 on the dust collected in the baghouse, the allowable emission rate of particulate matter from the melt shop roof exhausts, and the actual monthly operation of the electric arc furnaces.
- i. The following equation shall be used to determine the emissions of individual HAP metals from the melt shop roof exhausts:
$$\text{HAP}_i = (\text{percentage of individual HAP in the baghouse dust}) \times 1/100 \times 24.9 \text{ lbs/hr} \times \text{OH}$$

Where,

HAP_i = individual HAP metal emission rate (lbs/month)

24.9 lbs/hr = allowable PM emissions rate through melt shop roof exhausts

OH = number of hours that the electric arc furnaces were in operation
 - ii. The monthly emission rate of total HAP metals shall be determined by summing the emission rates of the individual HAP metals.
- C. The permittee shall record monthly the rolling 12-month total of total HAP metal emissions, based on the equations listed in Section 15.B of Iowa DNR Construction Permit 05-A-218.
- D. The permittee shall submit an annual report to the Iowa DNR, Air Quality Bureau. The report shall include an estimate of HAP metal emissions (single and total) in tons per year from the EAF baghouse and the melt shop roof exhausts. This report is due by March 15 and shall cover the previous calendar year.
- E. The permittee shall submit reports that identify all exceedances of the rolling 12-month emissions limitations for HAPs from Section 10. The report shall be submitted no later than 30 days from the end of the month in which the exceedance occurred.
- F. The permittee shall maintain maintenance records on any work that is done on the capture hoods that serve the electric arc furnaces.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

Authority for Requirement: Iowa DNR Construction Permit 05-A-218

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 71

Stack Diameter (inches, dia.): See Note A. below

Exhaust Flow Rate (scfm): See Note A. below

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Obstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-218

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

A. The meltshop exhausts through the following:

- i. Four small powered ventilators, each with a stack diameter of 10.7 feet and each rated at 39,600 acfm.
- ii. Nine large powered ventilators, each with a stack diameter of 14.4 feet and each rated at 67,000 acfm.
- iii. One roof monitor, stack dimensions of 27.9 feet by 426.5 feet and rated at 63,500 acfm.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-2

Associated Equipment

Associated Emission Unit ID Number: EU-2
Emissions Control Equipment ID Number: CE-2
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: EP-2
Emission Unit Description: Lime Storage Silo
Raw Material/Fuel: pebble lime
Rated Capacity: 20 tons per hour

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.1 lbs./hr
Authority for Requirement: Iowa DNR Construction Permit 03-A-962

Pollutant: Particulate Matter (PM)
Emission Limit: 30.5 lb/hr ⁽¹⁾
Authority for Requirement: 567 IAC 23.3(2)"a"
Iowa DNR Construction Permit 03-A-962

⁽¹⁾ Unit was installed in 1976; PM limit is based on the Process Weight Rate Table at a maximum fill rate of 20 tons per hour.

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 55.5

Stack Diameter (inches, dia.): 6

Exhaust Flow Rate (scfm): 3.6 (displacement flow)

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-962

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-3

Associated Equipment

Associated Emission Unit ID Numbers: EU-3A

Emissions Control Equipment ID Number: CE-1

Emissions Control Equipment Description: Wheelabrator Fabric Filter Baghouse

Emission Unit vented through this Emission Point: EU-3A

Emission Unit Description: Electric Arc Furnaces (3) with Co-Jet Technology

Raw Material/Fuel: steel scrap, additives

Rated Capacity: 38.3 tons per hour

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-107-S2

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(5)

Pollutant: Particulate Matter (PM)

Emission Limit: 16.1 lbs./hr., 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Iowa DNR Construction Permit 76-A-107-S2

Pollutant: Single Hazardous Air Pollutants (Single HAP)

Emission Limit(s): 9.4 TPY

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Pollutant: Total Hazardous Air Pollutants (Total HAP)

Emission Limit(s): 24.4 TPY

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Pollutant: Total Hazardous Air Pollutants Metals (Total HAP Metals)

Emission Limit(s): 3.1 TPY

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

- A. The permittee shall operate the EAF baghouse whenever an electric arc furnace is in operation. The average capture efficiency during charging, melting, refining, and tapping operations shall be 95%. This is based on information provided by the permittee on the capture efficiency of the side draft hoods and the slag door hoods on the furnaces. It is also based on the US EPA documents, Summary of Factors Affecting Compliance by Ferrous Foundries, Volume I, January, 1981 and Electric Arc Furnaces in Ferrous Foundries – Background Information for Proposed Standards, May, 1980.
- B. The permittee shall minimize the charging of scrap that contains oil, grease or organic impurities.
- C. The furnaces shall be used to produce carbon steel. Prior to operating the furnaces to produce alloyed steel, the permittee shall notify the Iowa DNR, Air Quality Bureau.
- D. The permittee shall maintain and operate the capture hoods and the capture system on the electric arc furnaces in accordance with the manufacturer's recommendations.

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Operating Conditions Monitoring

- A. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall record the pressure drop across the baghouse at least once per day.
- B. The permittee shall record the monthly emissions of single HAP metals and total HAP metals from the EAF baghouse. The basis of the record shall be the most recent testing done for HAP metals and PM under section 12 of Iowa DNR Construction Permit 76-A-107-S2 and the actual monthly operation of the electric arc furnaces.
 - i. The following equation shall be used to determine the emissions of individual HAP metals from the EAF baghouse:

$$\text{HAP}_i = (\text{percentage of individual HAP of PM emissions}) \times 1/100 \times \text{PM} \times \text{OH}$$

Where,

HAP_i = individual HAP metal emission rate (lbs/month)

PM lbs/hr = actual PM emission rate based on most recent stack test done under section 12 of this permit

OH = number of hours that the electric arc furnaces were in operation

- ii. The monthly emission rate of total HAP metals shall be determined by summing the emission rates of the individual HAP metals.
- C. The permittee shall record monthly the rolling 12-month total of total HAP metal emissions, based on the equations listed in Section 15.B of Iowa DNR Construction Permit 76-A-107-S2.
- D. The permittee shall submit an annual report to the Iowa DNR, Air Quality Bureau. The report shall include an estimate of HAP metal emissions (single and total) in tons per year from the EAF baghouse and the melt shop roof exhausts. This report is due by March 15 and shall cover the previous calendar year.
- E. The permittee shall submit reports that identify all exceedances of the rolling 12-month emissions limitations for HAPs from Section 10 of Iowa DNR Construction Permit 76-A-107-S2. The report shall be submitted no later than 30 days from the end of the month in which the exceedance occurred.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 11

Stack Opening (inches, dia.): 84 inches x 42 inches ⁽¹⁾

Exhaust Flow Rate (scfm): 187,700

Exhaust Temperature (°F): 150

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

⁽¹⁾ There are four exhaust fans on this unit with identical characteristics.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing

Pollutant	Testing Required	Test Run Time	Test Method
PM (state)	Yes	2 hour	Iowa Compliance Sampling Manual Method 5
Opacity	Yes	1 hour	40 CFR 60, Appendix A, Method 9
HAP metals	Yes*	2 hour	40 CFR 60, Appendix A, method 29

* The permittee shall submit a report to the Iowa DNR - Air Quality Bureau if the results of the metals testing is significantly different than what was reported in the construction permit application for Project Number 04-433.

If specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 (TV Emissions Limit Section) within 90 days after the issuance of this permit (3/21/05). The permittee shall conduct a second test (January 3rd & 4th, 2008) ⁽¹⁾ on the baghouse 2.5 years after the first test required by construction permit 76-A-107-S2. Thereafter, a stack test is required on the baghouse every 2.5 years unless the results of the testing show that the emissions are less than 70% of the allowable emission rates. If the results of the testing show that emissions are less than 70% of the allowable emission rates, the permittee may perform the required tests once every five years. At the same time that the baghouse's exhaust stack is tested, the permittee shall perform an analysis on the baghouse dust for the concentration of HAP metals. The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the DNR. Unless otherwise specified by the DNR, each test shall consist of three separate runs. The arithmetic mean of three acceptable test runs shall apply for compliance, unless otherwise indicated by the DNR. The test methods and run times to be used are those stated above unless otherwise approved by the DNR.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the DNR shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The DNR shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

⁽¹⁾ The first stack test to verify compliance with the emission limitations contained in the TV Emissions Limit Section of this permit was conducted on June 14th, 2005. The second stack test was conducted on January 3rd & 4th, 2008 and demonstrated the emissions are less than 70% of the allowable emission rates.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

Authority for Requirement: 567 IAC 22.108(3)

CAM Plan for EP-3, EU-3A Baghouse

This emission point shall conform to the conditions listed below

Emissions Unit

Emission Unit: Electric Arc Furnaces (3) (EU-3A)

Facility: Griffin Wheel Company-Keokuk, Iowa Plant

Pollutant: PM, Opacity

Emission Control Technique: Baghouse

Control Device Identification Number: CE-1

Emission Egress Point Identification Number: EP-3

Applicable Requirements

Particulate Matter (PM) Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(5)

Particulate Matter (PM) Limit: 16.1 lbs/hr., 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 76-A-107-S2

Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-107-S2

Monitoring Approach

Applicable Requirements	PM Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	Baghouse pressure drop readings are performed daily.	Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit.
Monitoring Methods and Locations (continued)	<p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>
Indicator Range/Source	<p>Pressure drop: 5 to 11 in. H₂O.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>	<p>Presence of visible emissions.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>
Data Collection Frequency	<p>Daily: Pressure drop observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>	<p>Weekly: Visible emissions observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trainer per Method 22.

Justification and Rationale

A frequent inspection of the baghouse and its components will insure that it continues to operate properly and achieve the desired particulate emission control efficiency. The absence of visible emissions is a good indicator of low emissions and proper air pollution control (APC) device operation.

Additional Comments

Although Method 22 applies to fugitive sources, the visible/no visible emissions observation techniques of Method 22 can be applied to ducted emissions. For situations where no visible emissions are the norm, a technique focused toward identifying a change in performance as indicated by visible emissions is a useful and effective technique. The use of the visible/no visible emissions technique reduces the need for an on-site Method 9 observer.

For large pollutant specific emissions units (post control potential to emit equal to or greater than 100 percent of the amount required for a source to be classified as a major source), CAM requires the owner or operator to collect four or more data values over each hour. Since this emissions unit is not classified as a "large" source (post control potential to emit is less than 100 TPY), this monitoring approach is not required.

Reference/Information Source

Method 22—Visual determination of fugitive emissions from material sources and smoke emissions from flares.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-4

Associated Equipment

Associated Emission Unit ID Number: EU-6A

Emission Unit vented through this Emission Point: EU-6A

Emission Unit Description: Enclosed Pressure Pouring/Casting—42 tons of steel/hr.

Raw Material/Fuel: molten steel

Rated Capacity: 42 tons/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 03-A-996

⁽¹⁾ An exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.14 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 03-A-996

Pollutant: Particulate Matter (PM)

Emission Limit: 43 lb/hr ⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 03-A-996

⁽²⁾ Unit was installed in 1976; PM limit is based on the Process Weight Rate Table at a maximum pour rate of 42 tons per hour.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

The enclosed pressure pouring system shall be operated at all times when pouring metal into molds.

Authority for Requirement: Iowa DNR Construction Permit 03-A-996

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 59

Stack Opening (inches, dia.): 4

Exhaust Flow Rate (scfm): 167

Exhaust Temperature (°F): 200

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-996

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-5

Associated Equipment

Associated Emission Unit ID Numbers: EU-5, EU-9, EU-10, EU-17A, EU-17B, EU-18, EU-21, EU-34 & EU-37

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
EP-5	EU-5	Tube Preheat (3)	Natural Gas/Propane	1.0 MMBTU/hr per unit
	EU-6B	Pressure Casting	Molten Steel	42 ton/hr
	EU-9	Normalizing Furnace	Natural Gas/Propane	39.9 MMBTU/hr
	EU-10	Tempering Furnace	Natural Gas/Propane	4.0 MMBTU/hr
	EU-17A	Riser Knockout	Coated Sand	1.75 ton/hr
	EU-17B	Riser Knockout	Rice Hulls	0.05 ton/hr
	EU-18	Core Baking Station	Coated Sand	1.75 ton/hr
	EU-21	Mold Holding Oven	Natural Gas/Propane	5.0 MMBTU/hr
	EU-34	Mold Preheat Oven (3)	Natural Gas/Propane	4.5 MMBTU/hr
	EU-37	Tube Curing	Natural Gas/Propane	2.9 MMBtu/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 03-A-963-S1

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit(s): 0.75 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 03-A-963-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 03-A-963-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Iowa DNR Construction Permit 03-A-963-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

The furnaces and ovens covered by this construction permit shall be fired by natural gas or LPG only.

Authority for Requirement: Iowa DNR Construction Permit 03-A-963-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 64

Stack Opening (inches, dia.): See Note below ⁽¹⁾

Exhaust Flow Rate (scfm): See Note below ⁽¹⁾

Exhaust Temperature (°F): See Note below ⁽¹⁾

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-963-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

⁽¹⁾ Emissions exhaust through 15 roof monitors above the molding area. Each monitor is approximately 28 feet by 28 feet.

The following equipment may be connected to this emissions point:

Equipment	Maximum Capacity
Tube Preheat – 3 units (EU-5)	1.0 MMBTU/hr per unit, natural gas/LPG
Pressure Pouring/Casting Station (EU-6B)	42 tons metal per hour
Rotary Hearth Normalizing Furnace (EU-9)	39.9 MMBTU/hr, natural gas/LPG
Tempering Furnace (EU-10)	4.0 MMBTU/hr, natural gas/LPG
Core Baking Station (EU-18)	1.75 tph, coated sand
Mold Holding Oven (EU-21)	5.0 MMBTU/hr, natural gas/LPG
3 Mold Preheat Ovens (EU-34)	4.5 MMBTU/hr per unit, natural gas/LPG
Riser Knockout (EU-17A)	1.75 tons per hour
Riser Knockout (EU-17B)	0.05 ton per hour
Tube Curing (EU-37)	2.9 MMBtu/hr, natural gas/LPG

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-6

Associated Equipment

Associated Emission Unit ID Numbers: EU-8A & EU-8B

Emissions Control Equipment ID Number: CE-3 & CE-4

Emissions Control Equipment Description: Spark Arrestor (CE-3) &
Fabric Filter Baghouse (CE-4)

Emission Unit vented through this Emission Point: EU-8A & EU-8B

Emission Unit Description: Hubcutters (3)

Raw Material/Fuel: propane & steel wheels (respectively)

Rated Capacity: 4.2 gallons per hour & 60-wheels per hour (respectively)

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-116-S3

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 1.46 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 76-A-116-S3

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-116-S3

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Iowa DNR Construction Permit 76-A-116-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

Oxygen and propane shall be used as the fuel for the cutting torches.

Authority for Requirement: Iowa DNR Construction Permit 76-A-116-S3

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 39

Stack Diameter (inches, dia.): 36

Exhaust Flow Rate (scfm): 11,685

Exhaust Temperature (°F): 175

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 76-A-116-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Baghouse Agency Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedence to the department and conduct source testing within 90 days of the exceedence to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and action will be initiated as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately two-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day of operation.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be initiated within eight hours to return the pressure drop to normal. If the manufacturer has not specified a normal pressure drop operating range, a normal range for this equipment shall be determined by Griffin Wheel. This determination shall be based on system design information, engineering judgment and on pressure drop data monitored during opacity observations. The rationale for the selected pressure drop range, including data and any calculations used to develop the value, shall be recorded and maintained along with other maintenance records at the facility.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse.
- Pulse jet baghouse - check the air delivery system
- Check the hopper functions and performance.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to manufacturer recommendations.
- An adequate inventory of spare parts shall be kept.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-7

Associated Equipment

Associated Emission Unit ID Number: EU-13

Emissions Control Equipment ID Number: CE-5

Emissions Control Equipment Description: Pulse-Jet Baghouse

Emission Unit vented through this Emission Point: EU-13

Emission Unit Description: Apex Grinder, Wheel Grinder, Final Grinding, Chamfer Grinder

Raw Material/Fuel: Steel wheels

Rated Capacity: 93.3 tons/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

IDNR Construction Permit 88-A-160

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

CAM Plan for EP-7, EU-13 Baghouse

This emission point shall conform to the conditions listed below

Emissions Unit

Emission Unit: Grinding (Apex, Wheel, Chamfer, and Final) (EU-13)

Facility: Griffin Wheel Company-Keokuk, Iowa Plant

Pollutant: PM, Opacity

Emission Control Technique: Baghouse

Control Device Identification Number: CE-5

Emission Egress Point Identification Number: EP-7

Applicable Requirements

Particulate Matter (PM) Limit: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

Iowa DNR Construction Permit 88-A-160

Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Monitoring Approach

Applicable Requirements	PM Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	Baghouse pressure drop readings are performed weekly. The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly. Bags are inspected for leaks or wear on a quarterly basis. All baghouse components are inspected every 6 months to insure proper operation.	Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit. The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly. Bags are inspected for leaks or wear on a quarterly basis. All baghouse components are inspected every 6 months to insure proper operation.

Indicator Range/Source	Pressure drop: 3 to 8 in. H ₂ O. Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.	Presence of visible emissions. Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.
Data Collection Frequency	Weekly: Pressure drop observations. Monthly, Quarterly and semiannually: Equipment inspections.	Weekly: Visible emissions observations. Monthly, Quarterly and semiannually: Equipment inspections.
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trainer per Method 22.

Justification and Rationale

A frequent inspection of the baghouse and its components will insure that it continues to operate properly and achieve the desired particulate emission control efficiency. The absence of visible emissions is a good indicator of low emissions and proper air pollution control (APC) device operation.

Additional Comments

Although Method 22 applies to fugitive sources, the visible/no visible emissions observation techniques of Method 22 can be applied to ducted emissions. For situations where no visible emissions are the norm, a technique focused toward identifying a change in performance as indicated by visible emissions is a useful and effective technique. The use of the visible/no visible emissions technique reduces the need for an on-site Method 9 observer.

For large pollutant specific emissions units (post control potential to emit equal to or greater than 100 percent of the amount required for a source to be classified as a major source), CAM requires the owner or operator to collect four or more data values over each hour. Since this emissions unit is not classified as a "large" source (post control potential to emit is less than 100 TPY), this monitoring approach is not required.

Reference/Information Source

Method 22—Visual determination of fugitive emissions from material sources and smoke emissions from flares.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-8

Associated Equipment

Associated Emission Unit ID Numbers: EU-12 & EU-15

Emissions Control Equipment ID Number: CE-6

Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-12 & EU-15

Emission Unit Description: Wheel Cleaner & Wheel Peener (respectively)

Raw Material/Fuel: Abrasive shot

Rated Capacity: 90,000 lb/hr & 59,940 lb/hr (respectively)

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permits 76-A-117-S1

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.77 lbs/hr

Authority for Requirement: Iowa DNR Construction Permits 76-A-117-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permits 76-A-117-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 20

Stack Diameter (inches, dia.): 30

Exhaust Flow Rate (scfm): 9000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 76-A-117-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

CAM Plan for EP-8, EU-12, EU-15 Baghouse

This emission point shall conform to the conditions listed below

Emissions Unit

Emission Unit: Wheel Cleaner (EU-12) and Wheel Peener (EU-15)

Facility: Griffin Wheel Company-Keokuk, Iowa Plant

Pollutant: PM, PM-10, Opacity

Emission Control Technique: Baghouse

Control Device Identification Number: CE-6

Emission Egress Point Identification Number: EP-8

Applicable Requirements

Particulate Matter (PM) Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-117-S1

Particulate Matter > 10 microns (PM-10) Limit: 0.77 lbs/hr.

Authority for Requirement: Iowa DNR Construction Permit 76-A-117-S1

Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-117-S1

Monitoring Approach

Applicable Requirements	PM Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	Baghouse pressure drop readings are performed weekly. The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly. Bags are inspected for leaks or wear on a quarterly basis. All baghouse components are inspected every 6 months to insure proper operation.	Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit. The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly. Bags are inspected for leaks or wear on a quarterly basis. All baghouse components are inspected every 6 months to insure proper operation.
Indicator Range/Source	Pressure drop: 3 to 9 in. H ₂ O. Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.	Presence of visible emissions. Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.
Data Collection Frequency	Weekly: Pressure drop observations. Monthly, Quarterly and semiannually: Equipment inspections.	Weekly: Visible emissions observations. Monthly, Quarterly and semiannually: Equipment inspections.
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.

QA/QC	N/A—None	Visible emissions observer trainer per Method 22.
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Justification and Rationale

A frequent inspection of the baghouse and its components will insure that it continues to operate properly and achieve the desired particulate emission control efficiency. The absence of visible emissions is a good indicator of low emissions and proper air pollution control (APC) device operation.

Additional Comments

Although Method 22 applies to fugitive sources, the visible/no visible emissions observation techniques of Method 22 can be applied to ducted emissions. For situations where no visible emissions are the norm, a technique focused toward identifying a change in performance as indicated by visible emissions is a useful and effective technique. The use of the visible/no visible emissions technique reduces the need for an on-site Method 9 observer.

For large pollutant specific emissions units (post control potential to emit equal to or greater than 100 percent of the amount required for a source to be classified as a major source), CAM requires the owner or operator to collect four or more data values over each hour. Since this emissions unit is not classified as a "large" source (post control potential to emit is less than 100 TPY), this monitoring approach is not required.

Reference/Information Source

Method 22—Visual determination of fugitive emissions from material sources and smoke emissions from flares.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-9

Associated Equipment

Associated Emission Unit ID Numbers: EU-19

Emissions Control Equipment ID Number: CE-7 & CE-8

Emissions Control Equipment Description: Cyclone & Baghouse (respectively)

Emission Unit vented through this Emission Point: EU-19

Emission Unit Description: Cope Cleaner

Raw Material/Fuel: Abrasive sand

Rated Capacity: 300 lb/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-109

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this

facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-10

Associated Equipment

Associated Emission Unit ID Numbers: EU-20A, EU-23A, EU-20B & EU-23B

Emissions Control Equipment ID Number: CE-21

Emissions Control Equipment Description: Fabric Filter Baghouse

Emission Unit vented through this Emission Point: EU-20A, EU-23A, EU-20B & EU-23B

Emission Unit Description: Cope & Drag Coating Booths, Baghouse Preheaters

Raw Material/Fuel: Fused silica flour, veegum, gum powder, natural gas

Rated Capacity: 45.5 lb/hr per booth, 0.001 MMcf/hr per heater

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-111-S1

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 1.62 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 76-A-111-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.01gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-111-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Iowa DNR Construction Permit 76-A-111-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

The baghouse shall be maintained according to the manufactures specifications.

Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

The owner/operator shall maintain a record of all maintenance and repairs done to the baghouse.

Authority for Requirement: Iowa DNR Construction Permit 76-A-111-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 61

Stack Diameter (inches, dia.): 32

Exhaust Flow Rate (scfm): 18,928

Exhaust Temperature (°F): 100

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 76-A-111-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the following monitoring requirements.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Baghouse Agency Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedence to the department and conduct source testing within 90 days of the exceedence to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and action will be initiated as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately two-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day of operation.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be initiated within eight hours to return the pressure drop to normal. If the manufacturer has not specified a normal pressure drop operating range, a normal range for this equipment shall be determined by Griffin Wheel. This determination shall be based on system design information, engineering judgment and on pressure drop data monitored during opacity observations. The rationale for the selected pressure drop range, including data and any calculations used to develop the value, shall be recorded and maintained along with other maintenance records at the facility.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse.
- Pulse jet baghouse - check the air delivery system
- Check the hopper functions and performance.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be initiated within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to manufacturer recommendations.
- An adequate inventory of spare parts shall be kept.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-11

Associated Equipment

Associated Emission Unit ID Numbers: EU-22

Emissions Control Equipment ID Number: CE-10 & CE-11

Emissions Control Equipment Description: Cyclone & Baghouse (respectively)

Emission Unit vented through this Emission Point: EU-22

Emission Unit Description: Drag Cleaner

Raw Material/Fuel: Abrasive sand

Rated Capacity: 300 lb/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-108

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this

facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-13

Associated Equipment

Associated Emission Unit ID Numbers: EU-24

Emission Unit vented through this Emission Point: EU-24

Emission Unit Description: Sand Silo

Raw Material/Fuel: Sand

Rated Capacity: 12 tons/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit: 0.03 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 03-A-964

Pollutant: Particulate Matter (PM)

Emission Limit: 21.7 lb/hr ⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 03-A-964

⁽²⁾ Unit was installed in 1976; PM limit is based on the Process Weight Rate Table at a maximum fill rate of 12 tons per hour.

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 70

Stack Diameter (inches): 14 x 14

Exhaust Flow Rate (scfm): 2.4 scfm (displacement flow)

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-964

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-14

Associated Equipment

Associated Emission Unit ID Numbers: EU-25

Emissions Control Equipment ID Number: CE-13

Emissions Control Equipment Description: Fabric Filter Baghouse

Emission Unit vented through this Emission Point: EU-25

Emission Unit Description: Sand Transfer

Raw Material/Fuel: Sand

Rated Capacity: 8.1 tons/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 03-A-965

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.22 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 03-A-965

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 03-A-965

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 12

Stack Opening (inches, dia.): 10

Exhaust Flow Rate (scfm): 2,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-965

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-15

Associated Equipment

Associated Emission Unit ID Numbers: EU-26A, EU-26B, & EU-28

Emissions Control Equipment ID Number: CE-14 & CE15

Emissions Control Equipment Description: Cyclone & Baghouse (respectively)

Emission Unit vented through this Emission Point: EU-26A

Emission Unit Description: Sand Heater

Raw Material/Fuel: Sand

Rated Capacity: 8.1 tons/hr

Emission Unit vented through this Emission Point: EU-26B

Emission Unit Description: Sand Heater

Raw Material/Fuel: Natural gas (propane back-up)

Rated Capacity: 1.2 MMBtu/hr (25 gal/hr propane)

Emission Unit vented through this Emission Point: EU-28

Emission Unit Description: Distribution Cyclone

Raw Material/Fuel: Sand

Rated Capacity: 8.34 tons/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-110

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-16

Associated Equipment

Associated Emission Unit ID Numbers: EU-27

Emission Unit vented through this Emission Point: EU-27

Emission Unit Description: Sand Mixer

Raw Material/Fuel: sand

Rated Capacity: 8.34 tons/hr; 15,295 tons/yr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 05-A-217

⁽¹⁾ An exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 05-A-217

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 7.73 Tons per Year ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-217

⁽¹⁾ Compliance with this limitation shall be based on mass balance calculations derived from the amount of introduced resin, the phenol content of the resin, and a 50% volatilization rate. Resin usage will be recorded and kept for compliance demonstration purposes.

Pollutant: Single Hazardous Air Pollutants (Single HAP)—Phenol

Emission Limit(s): 7.73 TPY ⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-217

⁽²⁾ Compliance with this limitation shall be based on mass balance calculations derived from the amount of introduced resin, the phenol content of the resin, and a 50% volatilization rate. Resin usage will be recorded and kept for compliance demonstration purposes.

Pollutant: Total Hazardous Air Pollutants (Total HAP)

Emission Limit(s): 24.4 TPY

Authority for Requirement: Iowa DNR Construction Permit 05-A-217

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

- A. Phenol emissions from the sand mixer (EU 27) shall not exceed 7.73 tons in any rolling 12 month period.
- B. This permit is based on information provided by the permittee that phenol based resins will be used in the sand mixer. Prior to using resins that contain other HAPs, the permittee shall notify the Iowa DNR, Air Quality Bureau in writing.

Authority for Requirement: Iowa DNR Construction Permit 05-A-217

Reporting & Recordkeeping

- A. The permittee shall maintain the following daily records:
 - i. The identification and the phenol content of any resin used in the emissions unit;
 - ii. The amount of resin used (pounds); and
 - iii. The amount of coated sand produced.
- B. The permittee shall maintain the following monthly records:
 - i. The amount of coated sand produced;
 - ii. The emission rate of phenol from this emissions unit (tons); and
 - iii. The rolling, 12-month total of the emission rate of phenol from this emissions unit (tons).
- C. The monthly emissions of phenol shall be calculated by using the following equation:
$$E_{ph} = \sum_i (0.5 \times P_i / 100 \times R_i \times 1/2000)$$
Where,
 E_{ph} = tons of phenol emitted
 P_i = percent (%) of phenol in resin i
 R_i = amount of resin type i used during the month (pounds)
0.5 = phenol evaporation rate at the sand mixer, provided by resin supplier, HA International
- D. The permittee shall submit reports that identify all exceedances of the rolling 12-month emissions limitations for HAPs from Section 10 of Iowa DNR Construction Permit 05-A-217. The report shall be submitted no later than 30 days from the end of the month in which the exceedance occurred.

- E. If the rolling 12-month total of an individual HAP (i.e. phenol) emissions exceeds 6.0 tons per year, the permittee shall maintain the following daily records:
- i. The identification, the phenol content and the amount of each resin used in the sand mixer.
 - ii. The daily emission rate of phenol emissions from the sand mixer.
 - iii. Beginning with the first day after the emission rate of phenol exceeds 6.0 tons per year, the rolling, 365-day total of phenol emissions.

The permittee may return to the monthly recordkeeping required in Section 15.B of Iowa DNR Construction Permit 05-A-217. when the rolling 365-day total of phenol emissions is less than 6.0 tons. The monthly recordkeeping requirement will go back into effect beginning on the first day of the calendar month that follows the day on which phenol emissions are less than the 6.0 tpy threshold.

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

Authority for Requirement: Iowa DNR Construction Permit 05-A-217

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 33

Stack Opening (inches, dia.): 21

Exhaust Flow Rate (scfm): 3,720

Exhaust Temperature (°F): 110

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-217

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Periodic monitoring is not required at this time.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-17

Associated Equipment

Associated Emission Unit ID Numbers: EU-29, EU-30 & EU-31

Emissions Control Equipment ID Number: CE-16

Emissions Control Equipment Description: Pulse-Jet Baghouse

Emission Unit vented through this Emission Point: EU-29 & EU-30

Emission Unit Description: Bucket Elevator #1 & Bucket Elevator #2

Raw Material/Fuel: Sand

Rated Capacity: 8.34 tons/hr & 2.63 tons/hr (respectively)

Emission Unit vented through this Emission Point: EU-31

Emission Unit Description: Core Baker Bins (4)

Raw Material/Fuel: Sand

Rated Capacity: 4.38 tons/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

IDNR Construction Permit 87-A-141

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-18

Associated Equipment

Associated Emission Unit ID Numbers: EU-32

Emissions Control Equipment ID Number: CE-17

Emissions Control Equipment Description: Fabric Filter Baghouse

Emission Unit vented through this Emission Point: EU-32

Emission Unit Description: Graphite Mold Machining

Raw Material/Fuel: graphite

Rated Capacity: 174 lb/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-113-S1

⁽¹⁾ An exceedance of the indicator opacity of 20% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 1.86 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 76-A-113-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permits 76-A-113-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 35

Stack Opening (inches, dia.): 18

Exhaust Flow Rate (scfm): 3,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 76-A-113-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-19

Associated Equipment

Associated Emission Unit ID Numbers: EU-33

Emissions Control Equipment ID Number: CE-18

Emissions Control Equipment Description: Fabric Filter Baghouse

Emission Unit vented through this Emission Point: EU-33

Emission Unit Description: Ingate Lathe

Raw Material/Fuel: Graphite

Rated Capacity: 26 lb/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 76-A-115-S1

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.22 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 76-A-115-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 76-A-115-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 36

Stack Opening (inches, dia.): 8.5

Exhaust Flow Rate (scfm): 600

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 76-A-115-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-20

Associated Equipment

Associated Emission Unit ID Numbers: EU-7
Emissions Control Equipment ID Number: CE-19
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-7
Emission Unit Description: Hot Wheel Grinders
Raw Material/Fuel: Steel wheels
Rated Capacity: 90 wheels/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 10%
Authority for Requirement: 567 IAC 23.3(2)"d"
IDNR Construction Permit 97-A-537

Pollutant: PM-10
Emission Limit: 1.6 lb/hr
Authority for Requirement: IDNR Construction Permit 97-A-537

Pollutant: Particulate Matter (PM)
Emission Limit: 0.05 gr/dscf
Authority for Requirement: 567 IAC 23.4(6)
IDNR Construction Permit 97-A-537

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (ft. from the ground): 53.4
Stack Opening (inches, dia.): 38.4
Exhaust Flow Rate (acfm): 21,000
Exhaust Temperature (°F): 120
Discharge Style: Vertical, Unobstructed
Authority for Requirement: IDNR Construction Permit 97-A-537

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

CAM Plan for EP-20, EU-7 Baghouse

This emission point shall conform to the conditions listed below

Emissions Unit

Emission Unit: Hot Wheel Grinders (EU-7)
Facility: Griffin Wheel Company-Keokuk, Iowa Plant
Pollutant: PM, PM-10, Opacity
Emission Control Technique: Baghouse
Control Device Identification Number: CE-19
Emission Egress Point Identification Number: EP-20

Applicable Requirements

Particulate Matter (PM) Limit: 0.05 gr/dscf
Authority for Requirement: 567 IAC 23.4(6)
IDNR Construction Permit 97-A-537

Particulate Matter > 10 microns (PM-10) Limit: 1.6 lbs/hr.
Authority for Requirement: 567 IAC 23.4(5)
IDNR Construction Permit 97-A-537

Opacity Emission Limit: 10%
Authority for Requirement: 567 IAC 23.3(2)"d"
IDNR Construction Permit 97-A-537

Monitoring Approach

Applicable Requirements	PM, PM-10 Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	Baghouse pressure drop readings are performed weekly.	Visible emissions observations via Method 22 are performed

Monitoring Methods and Locations (continued)	<p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>weekly to ensure no visible emissions during the material handling operations of this unit.</p> <p>If visible emissions are present and corrective action does not return the observation to no visible emissions, a Method 9 observation will be performed.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>
Indicator Range/Source	<p>Pressure drop: 3.5 to 9 in. H₂O.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>	<p>Presence of visible emissions.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>
Data Collection Frequency	<p>Weekly: Pressure drop observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>	<p>Weekly: Visible emissions observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trainer per Method 22 and certified per Method 9

Justification and Rationale

A frequent inspection of the baghouse and its components will insure that it continues to operate properly and achieve the desired particulate emission control efficiency. The absence of visible emissions is a good indicator of low emissions and proper air pollution control (APC) device operation.

Additional Comments

Although Method 22 applies to fugitive sources, the visible/no visible emissions observation techniques of Method 22 can be applied to ducted emissions. For situations where no visible emissions are the norm, a technique focused toward identifying a change in performance as indicated by visible emissions is a useful and effective technique. If visible emissions are present and corrective action does not return the observation to no visible emissions, a Method 9 observation will be performed.

For large pollutant specific emissions units (post control potential to emit equal to or greater than 100 percent of the amount required for a source to be classified as a major source), CAM requires the owner or operator to collect four or more data values over each hour. Since this emissions unit is not classified as a "large" source (post control potential to emit is less than 100 TPY), this monitoring approach is not required.

Reference/Information Source

Method 22—Visual determination of fugitive emissions from material sources and smoke emissions from flares.

Method 9—Visual determination of opacity of emissions from stationary sources.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 21

Associated Equipment

Associated Emission Unit ID Numbers: 35

Emission Unit vented through this Emission Point: 35

Emission Unit Description: Road & Landfill

Raw Material/Fuel: fugitive dust

Rated Capacity: 13.39 VMT/day

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105(2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108(1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108(14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108(9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107(4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides

for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108(15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108(5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108(15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108(9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence Used in Establishing That a Violation Has or Is Occurring

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

- i. A brief description of the change within the permitted facility,
- ii. The date on which the change will occur,
- iii. Any change in emission as a result of that change,
- iv. The pollutants emitted subject to the emissions trade
- v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
- vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
- vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108(18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108(8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108(9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111(1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically

altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1023 W. Madison Street
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

Appendix A: 40 CFR 63.10880, Subpart ZZZZZ

**National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries
Area Sources**